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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/631,000	LUTZ, TODD ALEXANDER			
Office Action Summary	Examiner	Art Unit			
	Hilina S. Kassa	2625			
The MAILING DATE of this communication ap					
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICAT 136(a). In no event, however, may a reply to will apply and will expire SIX (6) MONTHS e, cause the application to become ABAND	TON. be timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133).			
Status					
1) ☐ Responsive to communication(s) filed on <u>09 N</u> 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowa	s action is non-final.	prospection as to the marits is			
closed in accordance with the practice under <i>l</i>		•			
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Disposition of Claims					
4) ☐ Claim(s) 3,4,23 and 25-33 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) 3,4,23 and 25-33 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine	er.				
10) The drawing(s) filed onis/ are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is	s objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached Of	fice Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list 	ts have been received. ts have been received in Appli prity documents have been rec u (PCT Rule 17.2(a)).	cation No eived in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Sumn				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Ma 5) Notice of Inform 6) Other:				

DETAILED ACTION

1. The response made to restriction has been acknowledged. The Examiner also acknowledges the elected Species III related to claims 3, 4, 23 and 25-33. Claims 1-2, 5-7, 9, 16-18 and 24 are cancelled. Also, claims 8, 10-15 and 19-22 are withdrawn from consideration.

Response to Arguments

2. Applicant's arguments with respect to claims 23, 25, 27, 30 and 33 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Vatland et al. (US Patent Number 6,091,507).
 - (1) regarding claim 23:

10/631,000

Art Unit: 2625

As shown in figure 4, Vatland et al. disclose a printing system (column 2, lines 55-58; note that the system is comprised of network bus, printing devices and host computers) comprising:

means for printing including means for rasterizing a print job to produce a rasterized version of said print job (column 3, lines 5-7; note that before a printer executes the print job, the print job gets rasterized);

means for transmitting, in response to rasterizing, said rasterizing version of said print job externally of said means for printing (column 3, lines 45-47; note that the rasterized imaged gets transmitted to the printing apparatus from the host via network interface);

means for storing, in response to transmitting, said rasterized version of said print job externally of said means for printing (column 5, lines 60-65; note that printer 76 has data buffer 90 which stores rasterized data);

means for receiving a request to print said print job (column 6, lines 15-24; note that printer 78 does not have RIP processor so it can only process RIP data provided by the other devices via the raster network bus 68); and

means for retrieving, in response to receiving said request, said rasterized version of said print job back to said means for printing (column 7, lines 4-7; note that the raster connection management module 132 transmits the corrected raster image according to the selected printer's profile to the selected printer to execute printing).

10/631,000 Art Unit: 2625

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 3, 4 and 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vatland et al. (US Patent Number 6,091,507) and in view of Fiske (US Patent Number 7,042,587 B2).

(1) regarding claim 25:

As shown in figure 4, Vatland et al. disclose a printing system (column 5, lines 29-39; note that the system includes network bus, raster network bus, printers, print server, computer systems etc.), comprising:

a storage device in communication with a network (90, figure 4; column 5, lines 60-65; note that); and

a server in communication with the network (82, figure 4, column 7, lines 8-11; note that the printer server is coupled to the network), the server configured to:

receive an unrasterized version of a given print job from the network (column 7, lines 8-10; note that the printer server receives PDL or unrasterized form of a print job); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching in response to receiving the print job, search the storage device to

10/631,000 Art Unit: 2625

determine whether a rasterized version of the given print job is stored on the storage device.

However, Fiske teaches in response to receiving the print job (column 3, lines 26-26; note that an image data such as PDL or graphic image data is received), search the storage device to determine whether a rasterized version of the given print job is stored on the storage device (column 3, lines 26-30; note that search is conducted to see if the received print job has been stored in rasterized version).

Vatland et al. and Fiske are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein, in response to receiving the print job, search the storage device to determine whether a rasterized version of the given print job is stored on the storage device. The suggestion/motivation for doing so would have been in order to prevent re-rasterizing a print job and to acquire an efficient memory. Therefore, it would have been obvious to combine Vatland et al. with Fiskto obtain the invention as specified in claim 25.

(2) regarding claim 3:

Vatland et al. further disclose, the printing system of claim 25, wherein said storage device is configured to store a plurality of rasterized print jobs generated by a plurality of image producing devices (column 5, line 60-column 6, line 2; note that the data buffer 90 is large enough to store plurality of raster images), said plurality of image

producing devices being in communication with the network (column 5, lines 44-50; note that the image producing devices are communicating via network).

(3) regarding claim 4:

Vatland et al. further disclose, the printing system of claim 25, further comprising one or more print job generators (column 5, lines 35-36; note that computer systems 70 and 72 are used to generate print jobs), each print job generator being configured to generate a respective print job (column 5, lines 44-45; note that computer system 70 generates PDL print jobs), said print job generators being in communication with the network (column 5, lines 44-46; note that the print job generator 70 is in communication with the network 100).

(4) regarding claim 26:

Vatland et al. further disclose the printing system of claim 25, further comprising a print engine in communication with the network (column 5, lines 54-56; note that the raster data buffer 90, stores raster data in preparation for printing the raster data at the print engine), wherein the server is configured to send the rasterized version of the given print job to the print engine (column 5, lines 51-56; note that raster connection management 92 maintains unique virtual connections between printer 76 and the devices providing raster data i.e. server for printing at the print engine 88).

(5) regarding claim 27:

Art Unit: 2625

As shown in figure 4, Vatland et al. disclose a printing system (column 5, lines 29-39; note that the system includes network bus, raster network bus, printers, print server, computer systems etc.), comprising:

means for receiving an unrasterized version of a print job from a network (column 7, lines 8-10; note that the printer server receives PDL or unrasterized form of a print job);

means for determining whether a rasterized version of the print job is stored on a storage means connected to the network (column 5, lines 60-65; note that the data buffer 90 stores the rasterized image);

means for retrieving the rasterized version of the print job from the storage means in response to determining that the rasterized version is stored (column 6, lines 2-9; note that after storing the rasterized images, repetitive printing could be made at the initiation of the user);

means for sending the rasterized print job to a means for printing an image from the rasterized print job (column 3, lines 3, lines 47-49; note that the rasterized document gets printed by the printer).

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching means for converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored.

However, Fiske teaches means for converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored (660,

Art Unit: 2625

665, figure 6; column 7, lines 24-31; note that if there is no rasterized version stored for the print job, the print data gets rasterized).

Vatland et al. and Fiske are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have a means for converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored. The suggestion/motivation for doing so would have been in order to acquire an efficient memory organization. Therefore, it would have been obvious to combine Vatland et al. with Fiskto obtain the invention as specified in claim 27.

(6) regarding claim 28:

Vatland et al. further disclose the printing system of claim 27, further comprising means for processing the stored rasterized version of the print job into a new rasterized print job (column 6, line 59-column 7, line 7; note that a printer is selected based on its profile information and the media/ink correction module uses media and ink information of the selected printer to adjust for media and ink differences so it produces a new rasterized form)

(7) regarding claim 29:

Vatland et al. further disclose the printing system of claim 27, further comprising:

10/631,000

Art Unit: 2625

means for determining whether the rasterized version of the print job is completely rasterized (column 5, lines 61-62; note that one complete raster image of a document is stored in the buffer 90); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching means for completing rasterization of the print job in response to determining that the print job is not completely rasterized.

However, Fiske discloses means for completing rasterization of the print job in response to determining that the print job is not completely rasterized (column 7, lines 24-29; note that once rasterization is complete, the rasterized image information gets rendered by the printing engine).

Vatland et al. and Fiske are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have a means for completing rasterization of the print job in response to determining that the print job is not completely rasterized. The suggestion/motivation for doing so would have been in order to advance the systems efficiency and reliability. Therefore, it would have been obvious to combine Vatland et al. with Fiske to obtain the invention as specified in claim 29.

(8) regarding claim 30:

As shown in figure 4, Vatland et al. disclose a printing method (column 5, lines 29-39; note that the method includes network bus, raster network bus, printers, print server, computer systems etc.), comprising:

10/631,000 Art Unit: 2625

receiving an unrasterized version of a print job (column 7, lines 8-10; note that the printer server receives PDL or unrasterized form of a print job);

in response to receiving, determining whether a rasterized version of the print job is stored on a storage device (column 5, lines 60-65; note that the data buffer 90 stores the rasterized image);

retrieving the rasterized version of the print job from the storage device in response to determining that the rasterized version is stored (column 6, lines 2-9; note that after storing the rasterized images, repetitive printing could be made at the initiation of the user);

printing an image from the rasterized print job (column 3, lines 3, lines 47-49; note that the rasterized document gets printed by the printer).

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching to convert the unrasterized print job into rasterized format in response to determining that no rasterized version is stored.

However, Fiske teaches converting the unrasterized print job into rasterized format in response to determining that no rasterized version is stored (660, 665, figure 6; column 7, lines 24-31; note that if there is no rasterized version stored for the print job, the print data gets rasterized).

Vatland et al. and Fiske are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to convert the unrasterized print job into rasterized format in response to determining that no rasterized version is stored. The suggestion/motivation

10/631,000 Art Unit: 2625

for doing so would have been in order to acquire an efficient memory organization.

Therefore, it would have been obvious to combine Vatland et al. with Fiskto obtain the invention as specified in claim 30.

(10) regarding claim 31:

Vatland et al. further disclose the method of claim 30, further comprising processing the stored rasterized version of the print job into a new rasterized print job (column 6, line 59-column 7, line 7; note that a printer is selected based on its profile information and the media/ink correction module uses media and ink information of the selected printer to adjust for media and ink differences so it produces a new rasterized form).

(11) regarding claim 32:

Vatland et al. further disclose the method of claim 30, further comprising:

determining whether the rasterized version of the print job is completely
rasterized (column 5, lines 61-62; note that one complete raster image of a document is
stored in the buffer 90); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching completing rasterization of the print job in response to determining that the print job is not completely rasterized.

However, Fiske discloses completing rasterization of the print job in response to determining that the print job is not completely rasterized (column 7, lines 24-29; note

10/631,000 Art Unit: 2625

that once rasterization is complete, the rasterized image information gets rendered by the printing engine).

Vatland et al. and Fiske are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to complete rasterization of the print job in response to determining that the print job is not completely rasterized. The suggestion/motivation for doing so would have been in order to advance the systems efficiency and reliability. Therefore, it would have been obvious to combine Vatland et al. with Fiske to obtain the invention as specified in claim 32.

(12) regarding claim 33:

Vatland et al. further disclose a system for use in printing an image (column 5, lines 29-39; note that the system includes network bus, raster network bus, printers, print server, computer systems etc.), comprising:

a network (66, figure 4; column 5, lines 36-39);

a storage device in communication with the network (90, figure 4; column 5, lines 40-42; note that the raster data buffer is in the printer 76 which is communicating with the network);

a first processor in communication with the network (70, figure 4) and configured to:

generate an unrasterized version of a print job (column 5, lines 44-45; note that the computer system 70 generates PDL data); and

10/631,000 Art Unit: 2625

transmit the unrasterized version of the print job over the network (column 5, lines 45-47; note that after generating the PDL, it sends it to the printer over the network); and

a second processor in communication with the network (76, figure 4) and configured to:

receive the unrasterized version of the print job from the network (column 5, lines 47-49; note that the printer 76 receives the PDL or unrasterized version of the print job); and

Vatland et al. disclose all of the subject matter as described as above except for specifically teaching in response to receiving the unrasterized version of the print job, determine whether a rasterized version of the print job is available on the storage device.

However, Fiske teaches in response to receiving the unrasterized version of the print job (column 3, lines 26-26; note that an image data such as PDL or graphic image data is received), determine whether a rasterized version of the print job is available on the storage device (column 3, lines 26-30; note that search is conducted to see if the received print job has been stored in rasterized version).

Vatland et al. and Fiske are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein, in response to receiving the unrasterized version of the print job, determine whether a rasterized version of the print job is available on the storage device. The suggestion/motivation for doing so would have been in order to

Art Unit: 2625

prevent re-rasterizing a print job and to acquire an efficient memory. Therefore, it would have been obvious to combine Vatland et al. with Fiskto obtain the invention as specified in claim 33.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins could be reached at (571) 272-7406.

Any response to this action should be mailed to:

10/631,000

Art Unit: 2625

Commissioner of Patent and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Hilina Kassa

February 15, 2008

Page 15

SUPERVISORY PATENT EXAMINER